



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,776	07/19/2005	Jacques Bellalou	263894US2PCT	1227
22850	7590	08/04/2008	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			HOBBS, MICHAEL L	
		ART UNIT	PAPER NUMBER	
		1797		
		NOTIFICATION DATE		DELIVERY MODE
		08/04/2008		ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/517,776	<b>Applicant(s)</b> BELLALOU ET AL.
	<b>Examiner</b> MICHAEL HOBBS	<b>Art Unit</b> 1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 19 July 2005.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-5,9 and 10 is/are rejected.
- 7) Claim(s) 6-8 and 11-15 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 27 December 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No./Mail Date 12/27/2004
- 4) Interview Summary (PTO-413)  
 Paper No./Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Specification***

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Objections***

3. Claims 6-8 and 11-15 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-5 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Burton et al. (WO 99/04228).

6. Burton discloses a high-throughput light detection instrument for illuminating the tops and bottom of a sample cuvette. For claim 1, Burton discloses a stage (123) or platform with multiple wells or reactors within the micro-plate (124) for holding a sample. Burton further discloses a top optic plate (112a) or mobile sensor that is moved by a motor to precisely optimize the signal-to-noise and signal-to-background ratios of the data sent from a confocal optics element (page 15 lines 18-22, 29-30; page 16 lines 1-4). The sample within the micro-well plates can be monitored by a chemiluminescence head (sensor 150) that is connected to a chemiluminescence detector for processing the data (Fig. 3).

7. For claim 3, Burton further discloses a second optic plate (112b) used to obtain optical data from the micro-well plate. With regards to claim 4, the sensor is a chemiluminescence head (sensor 150; page 26 lines 24-26). Regarding claim 5, the analyzer of Burton discloses a stage (123) which is connected to a z-axis adjustment mechanism (carriage 130) which is further connected to a motor (page 16 lines 3-5, Fig. 3). Burton also discloses a five-phase stepper motor to move the stage (page 50 lines 24-26). The Z-adjustment mechanism (carriage 130) is connected to the motor (266) by a support track (track 264; page 28 lines 24-27). The stage (123) moves the micro-wells in the X-Y axis and is fully capable of moving the micro-well plate in a circular motion.

8. For claim 9, Burton discloses the step of measuring the chemiluminescence of the sample (page 26 lines 24-27) and adjusting the optics head by using a precision top-of-plate sensor which is mounted on the upper optics heat (page 26 lines 16-18). Finally, Burton discloses moving the optics head to another well within the plate and taking an optical reading (Fig. 3).

9. Therefore, Burton meets the limitations of claims 1, 3-5 and 9.

10. Claims 1, 2 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Bannerjee (US 6,307,630 B1).

11. Bannerjee discloses a turbidimeter array system that uses a common light source and detector to obtain optical data from a plurality of test samples. For claim 1, Bannerjee discloses an array (Fig. 1) of sample chambers where light from a common light source (100) is sent to each chamber by an optical fiber (101,102) where the scattered light is collected by another optical fiber and transmitted to a detector (col. 3 lines 40-45). Bannerjee further discloses a rotating arm (135) or mobile sensor holder that is fully capable of receiving an external sensor. Furthermore, the optical data obtained from the optical fibers are sent to a conventional control electronics which converts the signal generated by the detector into a turbidity value (col. 3 lines 46-49).

12. For claim 2, Bannerjee discloses that the turbidity sensor includes a light source which is a light emitting diode and a detector which is a photodiode (col. 3 lines 58-64).

13. For claim 9, Bannerjee discloses using an array (Fig. 1) of sample chambers where light from a common light source (100) is sent to each chamber by an optical

fiber (101,102) where the scattered light is collected by another optical fiber and transmitted to a detector (col. 3 lines 40-45). Also, Bannerjee further discloses using a rotating arm (135) to obtain an optical sample from each sample chamber. Furthermore, the optical data obtained from the optical fibers are sent to a conventional control electronics which converts the signal generated by the detector into a turbidity value (col. 3 lines 46-49).

14. Therefore, Bannerjee meets the limitations of claims 1, 2 and 9.

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

18. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bannerjee (US 6,307,630 B1).

19. Bannerjee does not specify injecting or sampling based as a function of optical property of the sample. However, Bannerjee does disclose testing the turbidity of the water coming into a sample chamber via an inlet and outlet (col. 3 .lines 20-22; Fig. 2). Also, since the detector of Bannerjee is used for testing water samples after filtration, it would be within the skills of one of ordinary skill in the art would send more water samples to the chambers based on the optical results. Therefore, it would be obvious to one of ordinary skill in the art to either inject or sample more water based on the optical test results of Bannerjee. The suggestion for doing so at the time would have been in order to monitor effluent from a micro-filtration plant.

### ***Conclusion***

20. Claims 1-5, 9 and 10 are rejected. Claims 6-8 and 11-15 are objected to due to the incorrect dependency of the multiple dependent claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL HOBBS whose telephone number is

(571)270-3724. The examiner can normally be reached on Monday-Thursday 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William H. Beisner/  
Primary Examiner, Art Unit 1797

/M.H./  
MLH